

## Review of: "Reef Fish in the Vitória-Trindade Seamount Chain of the Southwestern Atlantic: Biogeographical Corridors and Impact of Fishing"

## Gabriel Araújo<sup>1</sup>

1 Universidade de São Paulo (USP)

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Studies on the biogeography and conservation of reef ichthyofauna in the Brazilian Province are always welcome, especially when focusing on isolated environments such as the Vitória-Trindade Ridge. However, the theoretical basis of the study in question is considerably outdated. Most of the references cited are from 2005 or earlier, with the exception of two.

Although the work addresses the biogeography of the Brazilian Province, there is no mention of fundamental works on the subject, such as:

- Floeter et al. 2008 (Biogeography of the Atlantic)
- Pinheiro et al. 2017 (Biogeography of the Vitória-Trindade Ridge)
- Pinheiro et al 2018 (Reef Fishes of the Southwestern Atlantic)
- Araujo et al. 2022 (Biogeography of the Western Atlantic)
- Cord et al 2022 (Biogeography of the Brazilian Province)

This gap significantly compromises the interpretation of the results. Some of the patterns highlighted as unprecedented, such as "This study found results not addressed in previous publications (Floeter & Gasparini, 2000; Floeter et al., 2001; Gasparini & Floeter, 2001; Joyeux et al., 2001; Rocha, 2003; Floeter et al., 2006; Feitosa et al., 2005), as it showed continuous distribution patterns of subtropical and tropical reef species on the continental margin and an extensive seamount chain", have already been extensively discussed in the more recent literature, including some of the articles mentioned above.

I recommend that the authors reinterpret their data in light of the updated bibliography, in order to strengthen the analysis and relevance of the study.

## References:

Floeter SR, Rocha LA, Robertson DR et al. Atlantic reef fish biogeography and evolution. Journal of Biogeography 2008;35:22–47

Pinheiro, H. T., Bernardi, G., Simon, T., Joyeux, J.-C., Macieira, R. M., Gasparini, J. L., ... Rocha, L. A. (2017). Island



biogeography of marine organisms. Nature, 549, 82-85. https://doi.org/10.1038/ nature23680

Pinheiro HT, Rocha LA, Macieira RM et al. South-western Atlantic reef fishes: Zoogeographical patterns and ecological drivers reveal a secondary biodiversity centre in the Atlantic. Diversity and Distributions 2018;24:951–65.

Araujo GS, Rocha LA, Lastrucci NS et al. The Amazon-Orinoco Barrier as a driver of reef-fish speciation in the Western Atlantic through time. Journal of Biogeography 2022;49:1407–19.

I. Cord, L. T. Nunes, C. X. Barroso et al., "Brazilian marine biogeography: a multi-taxa approach for outlining sectorization," *Marine Biology*, vol. 169, no. 5, pp. 1–13, 2022.